The new claims, renumbered as claims 1-20, correspond to original PCT claims as set forth in the following chart.

NEW CLAIM	CORRESPONDING ORIGINAL PCT CLAIM
1	1
2	2
3	3
4	6
5	17
6	34
7	36
8	38
9	39
10	41
11	44
12	45
13	46
14	48
15	47
16	49
17	50
18	51
19	52
20	58

New claim 6, corresponding to previous claim 34, incorporates features recited in previous claim 30. Applicants reserve the right to pursue the remaining claims later in prosecution.

The new claim set is attached hereto.

Pursuant to 35 U.S.C. 371(c)(2), this application is being filed without a paper copy of the specification, drawings, or sequence listing. Please substitute the original claims of the PCT with the claim set attached hereto.

LISTING OF THE CLAIMS

1. An isolated polypeptide, comprising a sequence represented by one of SEQ ID NO:1 through SEQ ID NO:7.

2. A pharmaceutical composition, comprising one or more polypeptides of claim 1 and a pharmaceutically acceptable carrier.

3. An immunogenic composition, comprising one or more polypeptides of claim 1 and, optionally, an adjuvant.

4. A vaccine, comprising one or more polypeptides of claim 1 and, optionally, an adjuvant.

5. An isolated polynucleotide comprising:

(a) a sequence represented by one of SEQ ID NO:25 through SEQ ID NO:31;

(b) a sequence which is at least about 90% identical to a sequence of (a);

(c) a sequence which hybridizes under conditions of high stringency to a polynucleotide which comprises a sequence of (a);

(d) a sequence which encodes a polypeptide represented by SEQ ID NO:1 through SEQ ID NO:7; or

(e) a complement of any of (a), (b), (c) or (d).

6. A host cell comprising a recombinant construct which comprises a polynucleotide of claim 5, operably linked to an expression control sequence.

7. The host cell of claim 6, which is eukaryotic.

8. An antibody specific for the polypeptide of claim 1.

9. The antibody of claim 8, which is a polyclonal antibody.

10. A kit for detecting the presence of *T. parva* in a sample suspected of containing *T. parva*, or for purifying *T. parva* from a sample containing *T. parva*, comprising an antibody of claim 8.

11. A method for protecting an animal against infection by *T. parva*, comprising administering to the animal a polypeptide of claim 1, under conditions effective for the animal to generate a protective antibody against the polypeptide.

12. A method for protecting an animal against infection by *T. parva*, comprising administering to the animal a polypeptide of claim 1, under conditions effective for the animal to generate *T. parva*-antigen-specific CTLs.

13. A method for protecting an animal against infection by *T. parva*, comprising administering to the animal a host cell of claim 6 under conditions effective for the animal to generate a protective antibody against a polypeptide expressed by the polypeptide.

14. A method for protecting an animal against infection by *T. parva*, comprising administering to the animal a host cell of claim 6, under conditions effective for the animal to generate *T. parva*-antigen-specific CD4+ helper and CD8+ Cytotoxic T lymphocyte responses.

15. A method for protecting an animal against infection by *T. parva*, comprising administering to the animal a host cell of claim 7 under conditions effective for the animal to generate a protective antibody against a polypeptide expressed by the polypeptide.

16. A method for protecting an animal against infection by *T. parva*, comprising administering to the animal a host cell of claim 7, under conditions effective for the animal to generate *T. parva*-antigen-specific CD4+ helper and CD8+ Cytotoxic T lymphocyte responses.

17. A method for detecting a pathogenic protozoan infection in a subject, comprising contacting peripheral blood monocytes from the subject with peptide-antigen pulsed cytotoxic T lymphocytes, wherein the cytotoxic T lymphocytes are obtained from an animal to which has been administered a polypeptide of claim 1, under conditions effective for the animal to generate *T. parva*-antigen-specific CTLs.

18. A method for detecting a pathogenic protozoan infection in a subject, comprising contacting peripheral blood monocytes from the subject with peptide-antigen pulsed

cytotoxic T lymphocytes, wherein the T lymphocytes are obtained from an animal to which has been administered a host cell of claim 7, under conditions effective for the animal to generate *T. parva*-antigen-specific CD4+ helper and CD8+ Cytotoxic T lymphocyte responses.

19. A method for detecting *T. parva* in a sample suspected of containing *T. parva*, comprising detecting in the sample a polynucleotide of claim 5.

20. A method for identifying *T. parva* in a sample suspected of containing *T. parva*, comprising contacting the sample with an antibody of claim 8, under conditions effective for the antibody to bind specifically to its cognate antigen, and detecting the presence of bound antibody.

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